

**AT&T WIRELESS SERVICES (AWS)
MEMORANDUM OF UNDERSTANDING RE E911 PHASE I SERVICE**

CARRIER:

Name: AT&T Wireless PCS, LLC
Address: P.O. Box 97061
City: Redmond
State: WA ZIP: 98073-9761

CARRIER CONTACT (24x7x365)
Name: SCC National Data Service Center
Phone Number: 303 581-5782
Fax Number: _____

CARRIER NOTIFICATION:

Name: E9-1-1 Project Manager
Address: P.O. Box 97061
City / ST / ZIP: Redmond, WA 98073-9761

Anticipated Deployment Date: see attached exhibit

PUBLIC SAFETY ANSWERING POINT ("PSAP"):

Name: _____
Address: _____
City: _____
State: _____ ZIP: _____

PSAP CONTACT (24x7x365)
Name: _____
Phone Number: _____
Fax Number: _____

PSAP NOTIFICATION:

Name: _____
Address: _____
City / ST / ZIP: _____

PSAP Service Jurisdictions: _____

SIGNATURES:

By signing below, each person represents that he/she is authorized to commit their company or government entity to this E911 Phase I Memorandum of Understanding, including the terms and conditions stated below, and agrees thereto.

PSAP:

By: _____
Name/Title: _____
Date: _____

CARRIER:

By: _____
Name/Title: _____
Date: _____

Recital: This Memorandum of Understanding ("MOU") between the parties described above is intended by the parties to document the respective roles and responsibilities of each Party and associated stakeholders, and to set forth the understandings of the parties re the Phase I E911 Service that will be delivered by AWS.

Service Description: Pursuant to this MOU, AWS shall provide E911 Phase I Service ("Service"), in compliance with Phase I of the Federal Communications Commission ("FCC") Order in Docket 94-102, as amended and the laws of the State of Virginia, but only in such portions of PSAP Service Jurisdictions that AWS operates its wireless service. A copy of functional specifications of such Service is attached hereto as Exhibit A, along with plans for the testing and implementation process as agreed to by AWS and PSAP ("Implementation Plan").

Confidential Information: Release of information provided by either party shall be handled in accordance with the Virginia Freedom of Information Act.

Term: This MOU is effective on the date of PSAP's signature, ("Effective Date") and shall remain effective for one (1) year ("Initial Term"). This MOU shall automatically renew for successive one (1) year terms ("Subsequent Term") unless written notice of termination is given to the other party not less than ninety (90) days prior to the expiration of each Subsequent Term.

Other Parties: The parties acknowledge that the provision of Phase I E-911 Service by AWS pursuant to this MOU is also subject to the completion of negotiations between AWS, PSAP, and the appropriate 9-1-1 Service Provider(s)/Local Exchange Carrier(s) regarding all interconnection elements needed to initiate Phase I E-911 Service, including but not limited to trunks, hardware upgrades (as applicable), and software. The parties further agree to work in good faith to resolve any issues that might arise in such negotiations. The parties understand, however, that the resolution of such issues necessarily will involve other entities which are not parties to this MOU, and that deployment of Phase I E-911 Service consequently may be delayed through no fault of either Party.

No Third-Party Beneficiary Relationship or Liability Created: This MOU does not create any relationship between or obligation to any person or entity other than between PSAP and AWS, either directly or indirectly

Assignment: The parties to this MOU may not assign any of their rights nor delegate any of their obligations under this MOU without the prior written consent of the other party (which consent shall not be unreasonably withheld), except that AWS may assign its rights or delegate its duties under this MOU to any of its affiliates, to the surviving entity in a merger or consolidation or to a purchaser of substantially all of the assets of the business to which this MOU relates without PSAP's written

consent. All the terms and provisions of this MOU will be binding upon and inure to the benefit of and be enforceable by the parties and their respective permitted successors and assigns.

Amendment/Modification/Termination: Any provision of this MOU may be amended at any time upon mutual agreement of the parties, executed in writing, and the observance of any provision may be waived only in writing signed by a duly authorized representative of the parties. In addition, the parties may also modify this MOU upon thirty (30) days written notice, if there is a change in an applicable law or if AWS should sell or otherwise dispose of all or part of its wireless communications service license for the provision of wireless communication service in any portion of the PSAP Service Jurisdictions. Upon such event, this MOU may be modified only as appropriate to reflect such disposition. This shall include removal of the relevant area from this MOU. In the event of legislative or administrative action that removes or substantially reduces the current authority of the Virginia Wireless E-911 Services Board as the sole entity which determines the disbursement of funds collected pursuant to Virginia Code Annotated Sections 56-484.12 through 56-484.18, as they may be amended from time to time this MOU shall terminate 90 days following the effective date of such action, unless the parties agree otherwise. This MOU shall also terminate automatically upon the failure by or inability of the Virginia Wireless E-911 Services Board to provide funds, pursuant to Virginia Code Annotated Sections 56-484.12 through 56-484.18, as they may be amended from time to time, and any regulations, guidelines, or other forms of implementation instructions promulgated thereunder.

Governing Law: This MOU is governed and construed under the laws of the Commonwealth of Virginia, except for matters within the exclusive jurisdiction of the FCC. The parties shall at all times comply in all material respects with all laws, rules, and regulations applicable to the performance of this MOU, including, but not limited to FCC rules and orders and Virginia law.

Entire Agreement/Joint Work Product: This MOU, together with the attached Exhibit A, constitutes the entire agreement between the parties and supersedes all prior agreements or understandings, whether written or oral, with respect to the provision of E911 Phase I Service. This MOU is the joint work product of the parties and has been negotiated by the parties and their respective counsel. It shall therefore be fairly interpreted in accordance with its terms and, in the event of any ambiguities, no inferences shall be drawn against either party.

Acknowledgements: The parties acknowledge that:

- These terms and conditions are for the parties' mutual benefit and should encourage the efficient and cooperative deployment of the Service

The parties acknowledge that AWS will incur costs in installing, testing, providing and maintaining Phase I E9-1-1 Service to PSAP. AWS shall seek reimbursement for these costs from the Virginia Wireless E-911 Services Board in accordance with Virginia Code Annotated Sections 56-484.12 through 56-484.18, as they may be amended from time to time and any regulations, guidelines, or other forms of implementation instructions promulgated thereunder. **The parties acknowledge that PSAP shall not be responsible for payment of Carrier costs and that AWS shall seek no recovery of its E911 Phase I service costs from PSAP.**

THIS DOCUMENT CONTINUES WITH EXHIBIT A ON FOLLOWING PAGE

AT&T Wireless Services
Virginia Memorandum of Understanding (“MOU”)
Phase I E911 Service
Exhibit “A”
Section A-1

IMPLEMENTATION PLAN

<i>Task</i>	<i><u>Target Date</u></i>	<i><u>Completed Date</u></i>	<i><u>Percent Complete</u></i>	<i><u>Responsibility</u></i>
Service Agreement Signed	6/15/01	TBD	0%	AWS/PSAP
Boundary Validation Completed	7/6/01	TBD	0%	AWS/PSAP
PSAP Inventory Completed	7/6/01	TBD	0%	AWS/PSAP
Order Facilities (MSC to SR)	7/13/01	TBD	0%	AWS
Routing Complete (routing & naming)	7/27/01	TBD	0%	SCC/PSAP
SCP Provisioned	8/10/01	TBD	0%	SCC
ALI and SR Provisioned	8/10/01	TBD	0%	SCC/LEC
Facilities (MSC to SR) installed/tested	7/23/01	TBD	0%	LEC/AWS
MSC Provisioned	9/1/01	TBD	0%	AWS
Testing & Turn-up	10/5/01	TBD	0%	AWS
<i>Deployment</i>	<i>PSAP</i>	<i>Start</i>	<i>Finish</i>	
TBD	TBD	TBD	TBD	

This information is subject to change through a working together process. Deployment will occur approximately 120 days after MOU is signed and Boundary Validation and PSAP Inventory Request are completed.

Section A-2

PHASE I E9-1-1 SERVICE ROLES AND RESPONSIBILITIES

According to the terms and conditions, AWS agrees to act in good faith to successfully implement and provide Phase I E9-1-1 Service to PSAP, and PSAP agrees to cooperate fully and work in good faith with AWS, Vendor and, where necessary as determined by AWS, third parties (such as the 9-1-1 Provider/LEC, Host ALI Provider, other public safety answering points, SCP software developers and hardware providers, and other suppliers and manufacturers) for the successful implementation and provision of Phase I E9-1-1 Service.

A. Description of Service.

1. **Definition of Phase I E9-1-1 Service.**
"Phase I E9-1-1 Service" shall mean the service by which AWS delivers a AWS Subscriber's Call Back Number and Cell Site/Sector Location Information to the designated PSAP when a AWS Subscriber has made a 9-1-1- Call. Non-callpath associated signaling (NCAS) shall be utilized in the provision of this service.
2. **Non-initialized Wireless Handsets.**
The parties acknowledge that, pursuant to the FCC Order, AWS is required to complete 9-1-1 Calls made by End Users using Wireless Handsets which have never been or are not currently in service with any AWS ("Non-initialized Wireless Handsets"). PSAP acknowledges that ANI delivered by AWS for 9-1-1 Calls using Non-initialized Wireless Handsets will be invalid through no fault of AWS, and that Phase I E9-1-1 Service is currently not technically feasible for 9-1-1 Calls using Non-initialized Wireless Handsets.
3. **Geographic Scope of Service.**
Subject to the terms and conditions of this Agreement, AWS agrees to implement and provide Phase I E9-1-1 Service to PSAP Entities within those portions of the PSAP Jurisdiction Areas in which AWS is licensed to provide Service, including all independent cities and towns set forth in Attachment A, which have requested such service pursuant to Virginia Code Annotated Sections 56-484.12 through 56-484.18, as they may be amended from time to time and any regulations, guidelines, or other forms of implementation instructions promulgated thereunder.
3. **Automatic Location Identification Record (ALI).**
The ALI record shall be provided to the PSAP in the same format as is currently provided for other enhanced 9-1-1 calls with the addition of the following elements:
 - AWS Name or recognized abbreviation
 - Cellular Site (street address)
 - Cellular Sector Information (in directional format such as N, S, NNW, SSE, etc. based on the direction the sector is facing)These elements must be added so that the character offsets are maintained to interfaced systems such as computer-aided dispatch systems.

B. Responsibilities of the Parties.

In addition to any and all other obligations of the parties set forth in this MOU, the responsibilities of the parties shall be as generally set forth below.

1. **Responsibilities of AWS.**
It shall be AWS's responsibility, in cooperation with PSAP and necessary Third Party Providers/Suppliers (including, but not limited to, Vendor, 9-1-1 Provider/LEC, Host ALI Provider, SCP software developers and hardware providers, and other suppliers and manufacturers), to work in good faith to implement and provide Phase I E9-1-1 Service to PSAP. This shall include the following:
 - participating in network design;
 - causing its network elements (such as the MSC and related data links and trunks) to be installed;
 - operating, maintaining and provisioning these network elements;
 - facilitating the development of a service implementation plan which will establish target dates for actions necessary for installation and activation of Phase I E9-1-1 Service;
 - acquiring necessary software and equipment;
 - entering into necessary interconnection agreements for interconnecting the MSC to Selective Router/E9-1-1 Tandems and for interconnecting the SCP to the ALI Database;
 - supervising and maintaining this Agreement (including its Attachments) and any amendments hereto;
 - working with Vendors to establish internal performance measures, including, but not limited to, statistics for call volumes, call set-up times, error resolutions and other critical measurements;
 - designating one "Daily Contact" for general matters and one "Emergency Contact" available to PSAP on a 24x7x365 basis; and
 - negotiating in good faith with the appropriate 9-1-1 Service Provider/LEC, in cooperation with PSAP, for appropriate interconnection agreements needed for the provision of Phase I E-911 Service.

Unless the Parties otherwise agree in writing, interconnection with the 9-1-1 Service Provider/LEC will be performed with the use of Centralized Automatic Message Accounting trunks. All Selective Router/E9-1-1 Tandem and ALI Database functions lie outside of the responsibility of AWS.

2. Responsibilities of PSAP

It shall be PSAP's responsibility to work in good faith with AWS and, where necessary as determined by AWS, with Third Party Providers/Suppliers (including, but not limited to, Vendor, 9-1-1 Provider/LEC, Host ALI Provider, SCP software developers and hardware providers, and other suppliers and manufacturers) for the successful implementation and provision of Phase I E9-1-1 Service. This shall include the following:

- validating PSAP Jurisdiction Area map boundaries, helping to form call routing criteria and notifying AWS, and Vendor or third-party, if applicable, of needed PSAP Jurisdiction Area changes;
- designating one "PSAP Daily Contact" for general matters, as well as one "PSAP Emergency Contact" at each PSAP to serve as a single point of contact available to AWS and Vendor on a 24x7x365 basis, as described more specifically in Section III.C.2. hereof;
- providing and updating information regarding the contacts for other necessary Third Party Providers/Suppliers, such as the 9-1-1 Provider/LEC and the Host ALI Provider;
- cooperating in the development of an implementation plan which will establish target dates for actions necessary for installation and Activation of Phase I E9-1-1 Service;
- providing and verifying needed data about each PSAP's existing infrastructure and any other information necessary for successful installation, maintenance and provision of Phase I E-9-1-1 Service;
- identifying appropriate ESN Routing Codes;
- informing third party vendors, such as Computer Aided Dispatch (CAD) providers, of data to be delivered with 9-1-1 Calls for coordination with PSAP premise-based systems;
- augmenting the trunks, if deemed necessary by the PSAP Entities, between a Selective Router/E9-1-1 Tandem and any PSAP;
- making good faith efforts to ensure that all PSAP premises equipment (1) is compatible with AWS's provision of Phase I E9-1-1 Service, and (2) has adequate capacity to handle incoming circuits in accordance with industry standards;
- informing AWS, and Vendor or third-party, if applicable, of any PSAP system changes that may affect Phase I E9-1-1 Service;
- cooperating in the creation of a trouble reporting mechanism and associated trouble resolution process; and
- cooperating with AWS in its good faith negotiations with the appropriate 9-1-1 Service Provider/LEC for appropriate interconnection agreements needed for the provision of Phase I E-911 Service.

Section A-3

Call Flow Description

The purpose of AWS' Phase I E9-1-1 Service is to provide the 9-1-1 Operator with a Call Back Number and general location information for 9-1-1 Calls. The process starts with a 9-1-1 Call being received at an AWS Cell Site when an AWS Wireless End User dials 9-1-1 (and, as necessary, presses the "Send" or analogous transmitting button) on a Wireless Handset. The Cell Site delivers the call to its MSC (the "switch" that controls all aspects of wireless calls). Recognizing the call as a 9-1-1 Call, the MSC sends the call to the SCP database provisioned with a special software applications and cell site database which immediately splits the call into two distinct paths: a voice path and a data path.

Voice path. The MSC queries the SCP database, where the Emergency Services Routing Key ("ESRK") is assigned based on the originating Cell Site or Cell Sector and the PSAP serving that area. (The ESRK is used for routing and is not able to be dialed.) This number is immediately returned to the MSC for routing along with the caller's voice to the appropriate Selective Router/9-1-1 Tandem.

In the Selective Router/9-1-1 Tandem, the voice call and the ESRK are routed to the appropriate PSAP using the Emergency Service Number (ESN) Routing Code assigned to the ESRK during the data development process.

Data path. Concurrently, the ESRK is also attached to the data path at the SCP. The caller's Call Back Number is passed through the SCP, along with the ESRK, to the Host ALI Provider's ALI Database. At the ALI Database, the caller's Call Back Number and the Cell Site/Sector Information are inserted into the ESRK's Host ALI Record in preparation for the PSAP's ALI Database lookup request.

When the voice call and ESRK arrive at the PSAP, the ESRK is used as the search-key for the corresponding ALI Database record. The ALI Database system delivers the resulting data stream of the caller's Call Back Number and the Cell Site/Sector Information to the PSAP, where it is displayed on the 9-1-1 Operator's computer screen.

The 9-1-1 Operator will have the AWS Wireless End User on the line with the corresponding Call Back Number and a text description of the location of the AWS Wireless End User identified by Cell Site or Cell Sector. Thus, in most cases, the voice and data portions of the call appear simultaneously.

PSAP acknowledges that various factors can prevent the call flow process from working exactly as described above. Any aspect of this call flow process is subject to reasonable modification by AWS, in its discretion, as long as the Phase I E9-1-1 Service is not thereby diminished. Upon such modification, this Exhibit may be appropriately amended by AWS.

Section A-4

9-1-1 Call Routing

1. Boundary establishment and verification for each PSAP must be accomplished to generate routing recommendations for Phase I E9-1-1 Service. Vendor or AWS shall contact each PSAP regarding this process, and each PSAP shall promptly provide to AWS and Vendor a written description or a boundary map (or shall verify the accuracy of a boundary map provided by Vendor) of the total emergency coverage area served by that PSAP. PSAP represents and warrants that any such map shall provide an accurate representation of each PSAP's Jurisdiction Area. PSAP shall notify AWS and Vendor promptly of any inaccuracies or changes that need to be made to the map as soon as possible after PSAP becomes aware of the inaccuracy or change. PSAP shall establish a working relationship with Vendor for boundary maintenance, database management and operational aspects of the Phase I E9-1-1 system.
2. Each PSAP shall promptly provide to Vendor and AWS all other requested data and information (or verifications of data and information) about each PSAP and its existing infrastructure relevant to the provision of Phase I E9-1-1 Service.
3. Each PSAP shall promptly communicate to Vendor and AWS any and all special criteria related to the geographic conditions within each PSAP Jurisdiction Area, including, but not limited to, special handling needed for 9-1-1 Calls made along a certain transportation route or from major land features, such as shopping malls near the boundaries of two cities, athletic stadiums or college campuses. AWS and Vendor may not be able to honor all special criteria requests, but will make good faith efforts to do so.
4. Vendor and AWS shall work together to produce routing path recommendations that determine which PSAP shall receive a 9-1-1 Call (and Call Back Number and Cell Site/Sector Information) when a 9-1-1 Call is made within a particular Cell Sector (and to establish a default PSAP in the event that it is not clear from which Cell Sector a 9-1-1 Call has been made, or if trunk blockage or system problems prevent normal routing). After these recommendations are made, the Parties shall review them and propose any desired modifications to these proposed recommendations. As appropriate, routing recommendations for a PSAP shall be made in conjunction with those made for any other public safety answering points in neighboring areas, including those in other states. Based on these proposals, Vendor and AWS shall determine the routing path for 9-1-1 Calls made from each Cell Sector ("Routing Path Decisions"). The Routing Path Decisions shall be documented in writing by Vendor and distributed to PSAP. A Routing Path Decision shall be deemed accepted by PSAP unless it sends written notice of objection to Vendor within ten (10) days of its receipt of the Routing Path Decisions. Such notice shall include specific grounds for the objection. Upon such an objection, the Parties shall work in good faith to reach agreement with regard to the Routing Path Decision, and until such agreement is reached, the Routing Path Decision shall be as preferred by PSAP, provided that it creates no conflict with routing path decisions made with other public safety answering points.
5. Once the Routing Path Decisions for the 9-1-1 Calls are decided, Vendor shall be responsible for coordinating the changes to be made in the Selective Router/E9-1-1 Tandem as to the ESRK for purposes of call handling. The Vendor shall also be responsible for establishing the SCP's routing of Cell Sectors to the PSAP Jurisdiction Areas. Vendor shall further be responsible for coordinating any required static data elements in the ALI Database.
6. Routing Path Decisions may be modified as necessary through a data update process maintained by AWS or Vendor. This includes changes to Routing Path Decisions made by the Parties in response to (1) changing local geographic details, (2) changes to Cell Site coverage areas, or (3) changes otherwise deemed necessary. In this respect, the data developed for routing of 9-1-1 Calls will be subject to additions, changes and deletions, similar to wireline data.
7. AWS Procedures for default and alternate routing are dependent upon switch capabilities and previous decisions made by other PSAP entities served by the same MSC/ Selective Router combination.

Default and alternate routing decisions shall be agreed to and memorialized by the parties and appended to this MOU prior to implementation.